# CoCoALib - Feature #366

# function (CoCoALib) for minimal generators (like old Minimalize)

11 Jun 2013 14:58 - Anna Maria Bigatti

Status: Closed Start date: 11 Jun 2013

Priority: High Due date:

Assignee: Anna Maria Bigatti % Done: 100%

Category:New FunctionEstimated time:10.00 hoursTarget version:CoCoALib-0.99532Spent time:6.50 hours

Description

Might require some thoughts about GBMill

2014-04-02 postponed again GBMill. Added functions MinGens and myMinimalize (but design for ideals still needs re-thinking)

## Related issues:

Related to CoCoALib - Design #455: Which sets of generators in an ideal?

Related to CoCoA-5 - Feature #365: add function to compute minimal generators...

Closed 11 Jun 2013

Related to CoCoALib - Feature #387: implement algorithm(s) for resolutions

New 23 Jul 2013

Related to CoCoA-5 - Design #1123: Should "minimalize" be obsolescent?

Closed 16 Nov 2017

# History

## #1 - 11 Jun 2013 17:24 - Anna Maria Bigatti

- Status changed from New to In Progress
- Assignee set to Anna Maria Bigatti
- Priority changed from Normal to High
- % Done changed from 0 to 40

#### #2 - 11 Jun 2013 19:05 - Anna Maria Bigatti

- % Done changed from 40 to 50

### #3 - 21 Mar 2014 10:46 - Anna Maria Bigatti

- Target version changed from CoCoA-5.0.9 to CoCoALib-0.99534 Seoul14
- % Done changed from 50 to 60

#### What should minimalize(I) do?

The cocoa-4 function would create a new ideal (submodule) generated by MinGens(I).

Of course that's easy to do. But it seems a real waste to remove all useful information contained in I, the GBasis at least.

Think about what should be copied into the new ideal.

# #4 - 28 Mar 2014 08:18 - Anna Maria Bigatti

- Status changed from In Progress to Resolved
- % Done changed from 60 to 80

#### Done.

The core function is called **myMinimalize** and is clever (i.e. saves all the precomputed data)

Called similarly to myElim and mySaturate. There is no "function" (i.e. minimalize(I))

Yet to do: for submodule.

24 Apr 2024 1/2

# #5 - 02 Apr 2014 16:01 - Anna Maria Bigatti

- Status changed from Resolved to Feedback
- Target version changed from CoCoALib-0.99534 Seoul14 to CoCoALib-0.99532
- % Done changed from 80 to 90

# #6 - 02 Apr 2014 16:04 - Anna Maria Bigatti

- Subject changed from implement function for minimal generators (like old Minimalize) to function (CoCoALib) for minimal generators (like old Minimalize)

# #7 - 03 Apr 2014 11:52 - Anna Maria Bigatti

- Status changed from Feedback to Closed
- % Done changed from 90 to 100
- Estimated time set to 10.00 h

## #8 - 16 Nov 2017 11:54 - Anna Maria Bigatti

- Related to Design #1123: Should "minimalize" be obsolescent? added

24 Apr 2024 2/2